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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
Finance Division
St. Louis 2, Missouri

BASIC ELEMENTS OF ACCOUNTING

Text No. 1

1. PURPOSE OF ACCOUNTING RECORDS

Accounting has been defined as "a science which treats of the systematic recording, compilation, and presentation in a comprehensive manner of the financial operations of a business organization." The purpose of accounting records is to provide a written history of financial facts and transactions in such form that they may be summarized and presented in statements showing the financial condition of the business at a given date and the results of operations during a stated period of time.

The above definition may seem to limit the application of accounting to commercial organizations engaged in manufacturing, marketing, financing, transportation, and other public or personal services, for profit. Because accounting finds its greatest application in this field, the fundamental principles usually are presented as relating to such business units. However, the basic principles are also applicable in keeping financial records for governmental bodies, fiduciaries, institutions and other non-profit organizations, such as REA Cooperatives.

It is with the work of the REA bookkeeper that this course is primarily concerned. The bookkeeper is an extremely important member of the cooperative's personnel not only because of the necessity for maintaining detailed and accurate records of the business life of the organization, but also because of the fact that in many cooperatives the bookkeeper must be able to analyze and interpret those records in terms which will make them of invaluable service to the management in the formulation of policy.

The texts to follow have been prepared in a manner thought best to achieve the aim of teaching the fundamentals of accounting and at the same time giving the student every opportunity to learn in concrete fashion just how the bookkeeping procedures, which are presented in logical sequence from the simple to the complex, apply to the specific tasks of the REA bookkeeper.

Accounting deals generally with money values, but statistical data may be, and often are, compiled through the accounting records; for example, production and sales of electric energy, hours of employees' labor, transportation, materials and such other data as may be useful in analyzing construction and operating transactions.

Some authors distinguish between bookkeeping and accounting by defining bookkeeping as the art of keeping a systematic record of business transactions; accounting, a science embracing a large body of financial, legal,

commercial, and economic principles. However, the two are so closely related that it seems better to regard bookkeeping simply as a part of the science of accounting without attempting to make any definite line of distinction.

The theory of accounting principles concerns the proper analyses of business transactions and the presentation of facts in financial statements and reports in such manner that all pertinent information is accurately shown. The practice of accounting involves the application of these principles to a given set of business transactions. It is the purpose of these texts to develop the subject in such a way that the reader may be able to obtain a practical knowledge of the general procedure in accounting as well as to comprehend the reasons underlying the procedure.

2. VALUE OF ACCOUNTING RECORDS

Accounting is essential to modern business. The financial success of any enterprise often depends upon the adequacy and accuracy of records. The wide expansion of business enterprise has brought about a situation whereby managers and directors must be furnished each day, week, or month with pertinent information regarding different aspects of the organizations which they direct. Creditors demand accurate statements of financial condition, showing the ability of the business to meet its obligations. Investors in an enterprise or members of a cooperative desire to know the stability of their enterprise. Governing bodies require accounting data for purposes of taxation and regulation.

3. BASIS FOR ESTABLISHING ACCOUNTS

Any proper and accurate system of accounts commences with and is based upon a statement of financial condition at a given date. Such a statement should present the following facts:-

(1) The value of all property owned, or total assets;
(2) The amount of debts outstanding, or total liabilities;
(3) The excess of assets over liabilities, which represents net worth, or proprietorship interest.

In the event the total obligations owed are in excess of the value of all property owned, there would be no proprietorship interest.

4. ASSETS DEFINED

An asset may be defined as all property of value, tangible or intangible, owned by an individual or corporation.

When it is said that a business or individual has "property," this may mean that it has title to certain real or personal property or it may mean

partial ownership. In general, land and anything attached thereto is real property; and movable property is personal property. The word "property" means a thing of value owned, or an interest in or a future right to real or personal property. Tangible property has physical body, intangible property does not, examples of the latter being such things as a share of stock, a promise to pay money, patent rights, and so forth. Things owned may or may not be of value in themselves to the owner; but if property rights may be exchanged for things needed or desired, they are always capable of being evaluated in terms of money.

5. LIABILITIES DEFINED

A liability is a debt or a financial obligation of a business due either immediately or at some future time. It is a legal right enforceable against the business. The obligation may be an unsecured claim or one wholly or partly secured by a lien against certain business properties. Liabilities represent the creditors' interest in the assets of a business.

6. CAPITAL

In the economic sense, "capital" refers to assets. It is important to understand that in accounting terminology capital usually represents the excess of assets over liabilities. Capital is also referred to as net worth, net assets, or proprietorship. Capital represents the owner's equity in the assets of the business.

A net loss or "deficiency" is an excess of liabilities over assets. In a sole proprietorship this would represent the owner's liability to business creditors.

7. EXAMPLES OF ASSET CLASSIFICATIONS

Assets are classified according to separate and distinct types and each type has an accepted name in accounting parlance. The titles that apply to some of the more common and important assets of a retail business are explained below.

"Cash" as used in accounting includes not only money on hand but also bank account balances or commercial paper redeemable in cash upon demand (such as checks, money orders, etc.) at a banking institution. It should be noted that the term excludes marketable securities and special deposits that are not subject to demand withdrawal.

"Notes Receivable" represent written promises to pay. They are made by others in acknowledgment of debts owed to the business. The classification may include drafts or acceptances as well as promissory notes.

"Accounts Receivable" generally represent the amounts owing from customers for services or goods sold on open account. These are oral promises

to pay money and may also include amounts due on open account from debtors other than trade customers. In REA these accounts are called "Accounts Receivable - Consumers," and represent amounts due for sales of electricity.

In the books of account, the amounts owing from each customer are recorded separately under the bookkeeping classification known as "Personal Account", because the title is the debtor's name. In a financial statement, however, all of these personal account balances are combined and stated as one amount under the classification of "Accounts Receivable". A list or schedule may be attached to the statement showing the amounts due, or to become due, from each of the individual debtors.

"Merchandise Inventory" or "Inventory" represents the amount of stock-in-trade available for purposes of sale at a given date. Inventory is determined by counting, listing, and ascertaining the value of marketable goods owned.

Those REA cooperatives which deal in materials and supplies for resale make use of the ordinary retail business type of merchandise inventory to designate such materials on hand at a given time. The chief stock-in-trade of electric companies, however, is a flow of electric current which of course cannot be inventoried in this manner. The main inventory problems of REA cooperatives are those connected with the money value of line materials and supplies on hand, such materials being held for the purpose of constructing new lines and repairing and maintaining older ones to facilitate the sale of current to the consumers.

"Prepaid Expenses" represent amounts expended but not considered expense until some future time when the services paid for are received or supplies on hand are used. Common examples of this type of asset include Prepaid Insurance, Stationery, and Supplies.

"Furniture and Fixtures" refers to movable partitions, showcases, counters, cabinets, chairs, desks, etc. used in the business and not held for purposes of resale. "Office Furniture and Equipment" is the title of this type of account in the REA system of accounts.

"Buildings" includes all buildings owned and used by the business.

"Land" represents the value of land owned by the business, including that upon which buildings are situated. Sometimes land and buildings are carried as one account, under the title "Real Estate". While this is not incorrect, it is preferable to carry these items separately so that a value is established for each. The reason for this is that land does not ordinarily depreciate in value while buildings are subject to continual lessening

in value due to use, lapse of time, and action of the elements.

8. EXPLANATION OF COMMON LIABILITIES

Liabilities, like assets, are classified into different groups and the name of each classification has been more or less definitely established by custom and usage. Some of the usual titles are given:

"Notes Payable" represent outstanding written promises to pay, made by the business in acknowledgment of debts owed to others.

"Accounts Payable" represent obligations owed by the business to its creditors on open account. These may arise from the purchase of merchandise, supplies, services, or equipment.

In the books, a record is made of the amounts due each creditor by the use of personal accounts. In a financial statement, however, the various accounts may be combined and shown under the heading of "Accounts Payable" and an itemized schedule prepared listing the amounts owed to the individual creditors.

"Accrued Expenses" refers to accumulating but unpaid claims against the business, usually for services received. The common examples of this kind of liability are salaries and interest, which accrue daily but are not due until a certain future date.

"Mortgage Payable" represents a written obligation which has been secured by mortgaging one or more of the business assets. Ordinarily the mortgage is placed on land and building--real property. Without going into the technicalities of a mortgage, it may be stated that the creditor has a certain right in the mortgaged asset by way of security for the payment of the debt. The obligation itself is usually in the form of a promissory note or bond.

The amounts of such mortgage notes made to the Federal Government by an REA cooperative are set up as a liability on the cooperative's books in an account entitled "Special Construction Obligation".

9. CAPITAL ILLUSTRATED

The terms "Capital" and "Deficiency" have already been defined. For purposes of illustration, assume that John Smith on July 1, 1939, owns the following property: Cash $8,000, Government bonds $2,000, land $2,500, and building $7,500. If Smith had no liabilities, his worth would be $20,000. However, he owes a $5,000 note secured by mortgage on the real estate. Although he owns assets totaling $20,000, his capital equity is $15,000,

as shown by the following statement:

John Smith
Statement of Assets, Liabilities, and Capital
As of July 1, 1939

Assets		Liabilities	
Cash	$ 8,000	Mortgage Payable	$ 5,000
Government Bonds	2,000		
Building	7,500	Net Worth	
Land	2,500	John Smith, Capital	15,000
	$20,000		$20,000

A summary of the facts shown by the statement would be: Total assets of the business are worth $20,000, in which the creditor's interest is $5,000 and the proprietor's equity is $15,000.

Instead of the situation above, assume that Tom Brown has assets and liabilities as given below. In this case, a deficiency rather than capital is disclosed.

Tom Brown
Statement of Assets and Liabilities
As of December 31, 1938

Assets and Deficiency		Liabilities	
Cash	$ 300	Taxes Payable	$ 250
Accounts Receivable	600	Accrued Wages Payable	200
Merchandise Inventory	4,500	Notes Payable	3,000
Furniture and Fixtures	500	Accrued Interest on Notes	50
Tom Brown, Deficiency	850	Accounts Payable	3,250
	$ 6,750		$ 6,750

10. ACCOUNTING EQUATION

Since capital is the excess of assets over liabilities, we may state that Assets - Liabilities = Capital. By transposition we change the negative to positive and derive what is known as the fundamental equation of accounting:

Assets = Liabilities + Capital

This equation is the foundation upon which the entire structure of double entry accounting theory rests. Therefore, note particularly its derivation and meaning. The total of the business assets is equaled by the creditor's interest and the owner's equity in those assets.

When liabilities exceed assets, there is a deficiency, and the form of this equation is changed to Assets + Deficiency = Liabilities, as shown by

the statement in the preceding section.

The Statement of Assets, Liabilities and Capital given for John Smith may be illustrated graphically by means of the following:

Assets ($20,000)	Liabilities ($5,000) Capital ($15,000)

This represents a set of scales. There is equal weight on each end and perfect balance is the result. This is the normal condition of affairs in every business and is always reflected by a double entry set of books correctly kept.

Following the illustration, it can be seen that (1) equal amounts (weights) may be added on each side, (2) equal amounts may be subtracted from each side, or (3) equal amounts may be substituted or exchanged on one side, without destroying the balance. The totals on each side may increase or decrease, but will always remain equal. This simple mathematical principle underlies double entry bookkeeping and is the explanation for the fact that no business transaction correctly recorded can destroy the equilibrium originally established.

Double entry bookkeeping is based upon the premise that every business transaction is dual in character; that is, affects two or more items of value. For example, if total assets are increased by purchase of goods on credit, or if assets are increased by obtaining a cash loan, a corresponding increase in liabilities results because a debt has been incurred in favor of the creditor. If an asset, such as an article of merchandise, is sold at a profit so that the total assets are increased by the amount of such profit, it is apparent that capital will be increased by the same amount.

If cash is used to pay a debt, the amount due creditors is likewise reduced, or, the decrease in assets is offset by a decrease in liabilities. If assets are decreased by reason of losses incurred or expenses paid, capital is decreased by an equal amount.

Exchanges may be made on one side without affecting the total. For example, if a customer pays his account, the asset Cash is increased and the asset Accounts Receivable is decreased a like amount; but total assets remain the same, equalling liabilities plus capital. Or, an account payable may be closed by giving a note payable, thus changing the form of the liability but not the amount.

These examples have been given to illustrate the fact, that, regardless of the nature of the transaction, simple or complex, a state of balance must always exist in accordance with the fundamental equation of Assets = Liabilities + Capital.

11. OPERATING STATEMENT

Assume that at December 31, 1939, John Smith's books show that he owns property and owes debts as follows, making his present net worth $16,175:

John Smith
Balance Sheet December 31, 1939

Assets		Liabilities		
Cash	$ 3,650	Accounts Payable		$ 4,675
Government Bonds	2,000	Accrued Taxes		150
Accounts Receivable	5,900	Mortgage Payable		5,000
Merchandise Inventory	4,500			
Building	7,375	Net Worth		
Land	2,500	John Smith, Capital	$15,000	
Prepaid Insurance	75	Net Profit	1,175	16,175
	$26,000			$26,000

Comparison of the statements of financial condition July 1 and December 31 brings out the fact that assets have increased $6,000 and liabilities have increased $4,825; therefore, capital (the excess of assets over the liabilities) has increased by the net amount, $1,175. Assuming that Smith has not changed his investment in the business by withdrawing or contributing assets, this increase in capital must be due to profits from the business.

In order to explain this increase in net worth from transactions, accounts have been compiled during the six months' period to show the sources of income and the various costs and expenses incurred. This information is presented for a trading concern in the income statement commonly called the Profit and Loss Statement or in the case of an REA cooperative by an operating statement. This statement shows the various changes in net worth because of business operations:

John Smith
Profit and Loss Statement
For the Period July 1 to Dec. 31, 1939

Sales		$12,250
Cost of Goods Sold:		
Merchandise Purchases	$13,150	
Less: Inventory December 31	4,500	8,650
Gross Profit on Sales		$ 3,600

Text No. 1

John Smith
Profit and Loss Statement (cont.)

Gross Profit on Sales (brought forward)			$ 3,600
Operating Expenses:			
Salaries and Wages		$ 1,075	
Advertising		850	
Taxes		150	
Depreciation of Building		125	
General Expenses		325	2,525
Net Operating Profit			$ 1,075
Other Income:			
Interest on Bonds	$ 50		
Cash Discounts Taken	200	$ 250	
Other Expense:			
Interest on Mortgage		150	100
Net Profit for the Period			$ 1,175

The operating statements of various kinds of businesses differ according to the principal source of income and the costs and expenses incurred with the earning of this income. The statement above is a typical one for a concern buying and selling merchandise.

Notice how the operating statement indicates changes in various assets and liabilities, offsetting the changes in net worth. Assuming that no unusual transactions have occurred, goods costing $13,150 were purchased, evidently on credit inasmuch as accounts payable are now $4,675. The difference of $8,475 probably was settled for $8,275 cash, discounts of $200 having been taken on certain payments. Goods on hand December 31 are worth $4,500, making the cost of goods sold $8,650. The selling price of this merchandise was $12,250 for which customers still owe $5,900 and presumably have paid $6,350 in cash. Various expenses were paid, tax liability was accrued, and the building was estimated to depreciate $125 during the six months' period. The procedure by which data are compiled regarding operations and financial condition will be fully explained and illustrated in subsequent texts.